

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A medical device for controlled release of one or more substances into a body cavity containing an electrolytic fluid comprising:
 - a power supply having first and second terminals;
 - a plurality of blister-like vesicles ~~mounted on~~ including a convex surface protruding above a first surface, each vesicle having at least a metallic portion formed from a first metal, and each vesicle having a wall surrounding a lumen, which is configured to be filled with the one or more substances that are to be released into the body cavity;
 - for each vesicle, an individual electrical connection between the metallic portion of the vesicle and the first terminal of the power supply, each connection including a switch so as to allow the metallic portion to function as an anode when the switch is closed; and
 - a cathode formed from a second metal attached to the second terminal of the power supply,
 - wherein the cathode is separated from the anodes by a space that is accessible by the electrolytic fluid when the device is in the body cavity.
2. (original) The device according to claim 1 further comprising a processor configured to close one or more switches at one or more predetermined times.

3. (original) The device according to claim 1 further comprising one or more magnetizable particles.

4. (previously presented) The device according to claim 1, wherein the switches are closed by means of a remote control.

5. (original) The device according to claim 1, wherein the body cavity is a urinary bladder or a digestive tract organ.

6. (previously presented) The device according to claim 1, wherein the anodes are formed from copper and the cathode is formed from zinc.

7. (original) The device according to claim 1 further comprising an inflatable balloon.

8. (previously presented) The device according to claim 7, wherein the balloon is formed with a magnetizable portion.

9. (previously presented) The device according to claim 7, wherein the balloon further comprises a self-sealing valve.

10. (previously presented) The device according to claim 7, wherein the device after inflation of the balloon floats in the electrolytic fluid.

11. (previously presented) The device according to claim 7, wherein the device after inflation of the balloon sinks in the electrolytic fluid.

12. (previously presented) The device according to claim 1, wherein one or more of the one or more substances are drugs or antibiotics.

13. (previously presented) The device according to claim 1, wherein one or more of the one or more substances are radioactive substances.

14. (previously presented) The device according to claim 1 further comprising one or more monitoring devices for parameters in the body cavity.

15. (previously presented) The device according to claim 14, wherein one or more of the one or more monitoring devices monitors a parameter of the body cavity selected from the the group consisting of:

pressure of the electrolytic fluid;

temperature of the electrolytic fluid;

density of the electrolytic fluid; and
composition of the electrolytic fluid.

16. (previously presented) The device according to claim 14 further comprising a processor configured to receive data from a monitoring device and to close one or more switches when under predetermined conditions in the body cavity.

17. (currently amended) A system for treating a body cavity of an individual, the system comprising:

a medical device for controlled release of one or more substances into a body cavity containing an electrolytic fluid comprising: a power supply having first and second terminals; a plurality of blister-like vesicles ~~mounted on~~ including a convex surface protruding above a first surface, each vesicle having at least a metallic portion formed from a first metal, and each vesicle having a wall surrounding a lumen, which is configured to be filled with the one or more substances that are to be released into the body cavity; for each vesicle, an individual electrical connection between the metallic portion of the vesicle and the first terminal of the power supply, each connection including a switch so as to allow the metallic portion to function as an anode when the switch is closed; and a cathode formed from a second metal attached to the second terminal of the power supply, wherein the cathode is separated from the anodes by a space that is accessible by the electrolytic fluid when the device is in the body cavity; and

an applicator for inserting the device into the body cavity or for removing the device from the body cavity, the applicator fitted at an end thereof with a gripping device for releasably gripping the device.

18. (currently amended) A system for treating a body cavity of an individual, the system comprising:

a medical device for controlled release of one or more substances into a body cavity containing an electrolytic fluid comprising: a power supply having first and second terminals; a plurality of blister-like vesicles ~~mounted on~~ including a convex surface protruding above a first surface, each vesicle having at least a metallic portion formed from a first metal, and each vesicle having a wall surrounding a lumen, which is configured to be filled with the one or more substances that are to be released into the body cavity; for each vesicle, an individual electrical connection between the metallic portion of the vesicle and the first terminal of the power supply, each connection including a switch so as to allow the metallic portion to function as an anode when the switch is closed; and a cathode formed from a second metal attached to the second terminal of the power supply, wherein the cathode is separated from the anodes by a space that is accessible by the electrolytic fluid when the device is in the body cavity, the medical device further comprising an inflatable balloon;

an applicator for inserting the device into the body cavity or for removing the device from the body cavity, the applicator fitted at an end thereof with a gripping device for releasably gripping the device; and

an inflating device for inflating the balloon.

19. (previously presented) The system according to claim 17 further comprising a magnetizable displacing member for displacing the device within the body cavity.

20. (previously presented) The system according to claim 17 further comprising an immobilizing member comprising a magnetizable portion, said immobilizing member being secured onto the individual's body for immobilizing the device at a desired location in the body cavity.

21. (original) The system according to claim 20, wherein the immobilizing member is in the form of a hygienic pad configured to be placed in a garment of the individual.

22. (previously presented) The system according to claim 17, wherein the gripping device comprises flanges.

23. (previously presented) The system according to claim 17, wherein the gripping device comprises a magnetizable portion.

24. (original) The system according to claim 18, wherein the inflating device comprises an injector for injecting a fluid into the balloon so as to expand the balloon.

25. (currently amended) A method for releasing one or more substances into a body cavity containing an electrolytic fluid of an individual comprising the steps of:

loading the one or more substances into the vesicles of a medical device for controlled release of one or more substances into a body cavity containing an electrolytic fluid comprising: a power supply having first and second terminals; a plurality of blister-like vesicles ~~mounted on~~ including a convex surface protruding above a first surface, each vesicle having at least a metallic portion formed from a first metal, and each vesicle having a wall surrounding a lumen, which is configured to be filled with the one or more substances that are to be released into the body cavity; for each vesicle, an individual electrical connection between the metallic portion of the vesicle and the first terminal of the power supply, each connection including a switch so as to allow the metallic portion to function as an anode when the switch is closed; and a cathode formed from a second metal attached to the second terminal of the power supply, wherein the cathode is separated from the anodes by a space that is accessible by the electrolytic fluid when the device is in the body cavity, the medical device further comprising an inflatable balloon;

inserting the device into the body cavity;

expanding the balloon in the body cavity; and

displacing the balloon within the urinary bladder to a desired location.

26. (currently amended) A method for releasing one or more substances into a body cavity containing an electrolytic fluid of an individual comprising the steps of:

loading the one or more substances into the vesicles of a medical device for controlled release of one or more substances into a body cavity containing an electrolytic fluid comprising: a power supply having first and second terminals; a plurality of blister-like vesicles ~~mounted on~~ including a convex surface protruding above a first surface, each vesicle having at least a metallic portion formed from a first metal, and each vesicle having a wall surrounding a lumen, which is configured to be filled with the one or more substances that are to be released into the body cavity; for each vesicle, an individual electrical connection between the metallic portion of the vesicle and the first terminal of the power supply, each connection including a switch so as to allow the metallic portion to function as an anode when the switch is closed; and a cathode formed from a second metal attached to the second terminal of the power supply, wherein the cathode is separated from the anodes by a space that is accessible by the electrolytic fluid when the device is in the body cavity, the medical device further comprising an inflatable balloon;

inserting the device into the body cavity; and

expanding the balloon in the body cavity.

27. (previously presented) The method according to claim 25 further comprising displacing the device within the body cavity to a desired location.

28. (previously presented) The method according to claim 25, wherein one or more of the one or more substances are selected from the group consisting of:

drugs;

immunoglobulins;

antibiotics; and

radioactive substances.